

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5

RECEIVED  
REGIONAL HEARING

IN THE MATTER OF: ) Docket No. CAA-5-2002-0016  
)  
Bretford Manufacturing, Inc. ) Proceeding to Assess an  
Franklin Park, IL ) Administrative Penalty  
) under Section 113(d) of the  
) Clean Air Act,  
Respondent. ) 42 U.S.C. § 7413(d)  
\_\_\_\_\_ )

Consent Agreement and Final Order

1. Complainant, the Director of the Air and Radiation Division, United States Environmental Protection Agency, Region 5 (EPA), brought this administrative action seeking a civil penalty under Section 113(d) of the Clean Air Act (the Act), 42 U.S.C. § 7413(d).

2. On September 25, 2002, U.S. EPA filed the complaint in this action against Respondent, Bretford Manufacturing, Inc. (Bretford), alleging in two counts that Respondent violated the Illinois State Implementation Plan (SIP) at 35 Ill. Admin. Code 218.214 at its facility in Franklin Park, Illinois, by using two different topcoats and a non-acid cured alkyd amino vinyl sealer on and after July 20, 1998, with volatile organic matter content that exceeded the regulatory limit.

Stipulations

3. Respondent owns and operates a wood furniture manufacturing facility that includes coating lines, with a

potential to emit greater than 25 tons of VOM or more per calendar year. Respondent's facility is located at 11000 Seymour Avenue, Franklin Park, Illinois 60131.

4. Respondent admits the jurisdictional allegations in the complaint and neither admits nor denies the factual allegations in the complaint.

5. Respondent waives its right to contest the allegations in the complaint, and waives its right to appeal under Section 113(d) of the Act, 42 U.S.C. § 7413(d).

6. Respondent certifies that it is complying fully with the Illinois SIP at its facility in Franklin Park, Illinois.

7. The parties consent to the terms of this Consent Agreement and Final Order (CAFO).

8. The parties agree that settling this action without further litigation, upon the terms in this CAFO, is in the public interest.

#### **Civil Penalty**

9. In consideration of the size of Respondent's business, the degree of cooperation by Respondent in remedying the violation by ceasing its use of the non-compliant coatings, and Respondent's agreement to perform two supplemental environmental projects as described more fully below, U.S. EPA agrees to mitigate the proposed penalty of \$59,000 to \$30,000.

10. Respondent must pay the \$30,000 civil penalty by cashier's or certified check payable to the "Treasurer, United States of America," within 30 days after the effective date of this CAFO.

11. Respondent must send the check to:

U.S. Environmental Protection Agency  
Region 5  
P.O. Box 70753  
Chicago, Illinois 60673

12. A transmittal letter, stating Respondent's name, complete address, the case docket number, and the billing document number must accompany the payment. Respondent must write the case docket number and the billing document number on the face of the check. Respondent must send copies of the check and transmittal letter to:

Attn: Regional Hearing Clerk, (R-19J)  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3590

Attn: Compliance Tracker, (AE-17J)  
Air Enforcement and Compliance Assurance Branch  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3590

Deborah Carlson, (C-14J)  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3509

13. This civil penalty is not deductible for federal tax purposes.

14. If Respondent does not pay timely the civil penalty, U.S. EPA may bring an action to collect any unpaid portion of the penalty with interest, handling charges, nonpayment penalties and the United States' enforcement expenses for the collection action under Section 113(d)(5) of the Act, 42 U.S.C. § 7413(d)(5). The validity, amount and appropriateness of the civil penalty are not reviewable in a collection action.

15. Interest will accrue on any overdue amount from the date payment was due at a rate established under 26 U.S.C. § 6621(a)(2). Respondent will pay a \$15 handling charge each month that any portion of the penalty is more than 30 days past due. Respondent will pay a quarterly nonpayment penalty each quarter during which the assessed penalty is overdue according to Section 113(d)(5) of the Act, 42 U.S.C. § 7413(d)(5). This nonpayment penalty will be 10 percent of the aggregate amount of the outstanding penalties and nonpayment penalties accrued from the beginning of the quarter.

#### **Supplemental Environmental Projects**

16. Respondent must complete the two supplemental environmental projects (SEPs) designed to protect the environment and public health as described more fully below and incorporated as Attachment A to this CAFO.

17. At its Franklin Park, Illinois facility, Respondent must complete the SEPs as follows:

A. SEP #1 UV Coatings in Laminate Line:

Respondent shall replace the existing solvent-based coatings with ultra-violet (UV) coatings in the laminate line as used to finish laminate products with solid wood edges.

Respondent shall not use any other coating material that contains chemicals with more VOM than the replaced chemical(s), as determined by the manufacturer's material safety data sheets. Respondent shall cease using the solvent based coatings and begin using the UV coatings in the laminate line within 5 months of the effective date of this CAFO. The cost to Respondent for completion of this SEP shall be no less than \$26,000. Failure to develop the UV coatings constitutes failure to complete the SEP pursuant to paragraph 24 of this CAFO.

B. SEP #2 Water-based Adhesives:

Respondent shall replace existing solvent-based adhesives used in the manufacturing of pinboards/whiteboards with water-based adhesives. Respondent shall not use any other adhesive that contains chemicals with more VOM than the replaced chemical(s), as determined by the manufacturer's material safety data sheets. Respondent shall begin the use of a water-based adhesive in the manufacturing of pinboards/whiteboards within 5 months of the effective date of this CAFO. The cost to Respondent for completion of this SEP shall be no less than \$5,000. Failure to develop the water-based adhesives constitutes failure to complete the SEP pursuant to paragraph 24 of this CAFO.

18. Respondent certifies that it is not required to perform or develop the SEPs by any law, regulation, grant, order, or agreement, or as injunctive relief as of the date it signs this CAFO. Respondent further certifies that it has not received, and is not negotiating to receive, credit for the SEPs in any other enforcement action.

19. U.S. EPA may inspect the facility at any time to monitor Respondent's compliance with this CAFO's SEP requirements.

20. Respondent must maintain copies of the underlying research and data for all reports submitted to U.S. EPA according to this CAFO and make them available to EPA upon request.

21. Respondent must submit a SEP completion report to U.S. EPA for review and approval within 6 months of the effective date of this CAFO. This report must contain the following information:

- a. detailed description of the SEPs as completed;
- b. description of any operating problems and the actions taken to correct the problems;
- c. itemized costs of goods and services used to complete the SEPs documented by copies of invoices, purchase orders, or canceled checks that specifically identify and itemize the individual costs of the goods and services;
- d. signed certification that Respondent has completed the SEPs in compliance with this CAFO; and
- e. description of the environmental and public health benefits resulting from the SEPs (quantify the benefits and pollution reductions, if feasible).

22. Respondent must submit all notices and reports required by this CAFO by first class mail to:

Attn: Compliance Tracker (AE-17J)  
Air Enforcement and Compliance Assurance Branch  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3590

23. In each report that Respondent submits as provided by this CAFO, it must certify that the report is true and complete

by including the following statement signed by one of its officers:

I certify that I am familiar with the information in this document and that, based on my inquiry of those individuals responsible for obtaining the information, the information is true and complete to the best of my knowledge. I know that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

24. If Respondent violates any requirement of this CAFO relating to the SEPs, Respondent must pay stipulated penalties to the United States as follows:

a. Except as provided in subparagraph b, below, if Respondent did not complete a SEP satisfactorily according to this CAFO, Respondent must pay a stipulated penalty of \$25,000 for failure to complete SEP #1 and \$4,000 for failure to complete SEP #2.

b. If Respondent did not complete a SEP satisfactorily, but U.S. EPA determines that Respondent: (i) made good faith and timely efforts to complete the SEP; and (ii) certified, with supporting documents, that it spent at least 90 percent of the required amount on the SEP, Respondent will not be liable for any stipulated penalty for failure to satisfactorily complete that SEP.

c. If Respondent satisfactorily completed the SEP(s), but spent less than 90 percent of the required amount on the SEP(s), Respondent must pay stipulated penalties of \$25,000 for SEP #1 and \$4,000 for SEP #2.

d. If Respondent failed to timely submit the SEP report required by paragraph 21 above, Respondent must pay a stipulated penalty of \$350 for each day after the report was due until it submits the report.

25. EPA's determinations of whether Respondent satisfactorily completed the SEPs and whether it made good faith, timely efforts to complete the SEPs are binding on Respondent.

26. Any public statement that Respondent makes referring to the SEPs must include the following language, "Bretford Manufacturing, Inc. undertook this project under the settlement of the United States Environmental Protection Agency's enforcement action against Respondent for violations of the Clean Air Act."

#### **General Provisions**

27. This CAFO settles U.S. EPA's claims for civil penalties for the violations alleged in the complaint.



28. Nothing in this CAFO restricts U.S. EPA's authority to seek Respondent's compliance with the Act and other applicable laws and regulations.

29. This CAFO does not affect Respondent's responsibility to comply with the Act and other applicable federal, state and local laws, and regulations.

30. This CAFO constitutes an "enforcement response" as that term is used in "U.S. U.S. EPA's Clean Air Act Stationary Source Civil Penalty Policy" to determine Respondent's "full compliance history" under Section 113(e) of the Act, 42 U.S.C. § 7413(e).

31. The terms of this CAFO bind Respondent, and its successors, and assigns.

32. Each person signing this consent agreement certifies that he or she has the authority to sign this consent agreement for the party whom he or she represents and to bind that party to its terms.

33. Each party agrees to bear its own costs and fees in this action.

34. This CAFO constitutes the entire agreement between the parties.

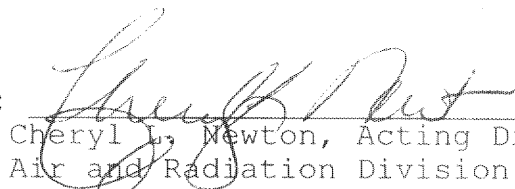
Consent Agreement and Final Order  
Bretford Manufacturing, Inc.  
Docket No. CAA-5-2002-0016

U.S. Environmental Protection Agency,  
Complainant

Date:

4/9/03

By:



Cheryl L. Newton, Acting Director  
Air and Radiation Division  
U.S. Environmental Protection  
Agency, Region 5 (A-18J)

Bretford Manufacturing Inc.,  
Respondent

Date:

3/25/03

By:



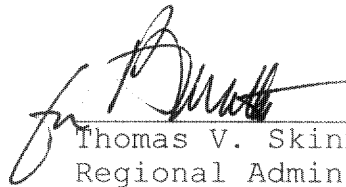
Peter Beestrum,  
Director of Operations  
Bretford Manufacturing, Inc.

Consent Agreement and Final Order  
Bretford Manufacturing, Inc.  
Docket No. CAA-5-2002-0016

Final Order

It is ordered as agreed to by the parties and as stated in the consent agreement, effective immediately upon filing of this CAFO with the Regional Hearing Clerk.

Date: 4/10/03



Thomas V. Skinner  
Regional Administrator  
U.S. Environmental Protection  
Agency, Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

## Attachment A

## Supplemental Environmental Projects

**Project 1** - Use of UV (Ultraviolet) coatings to finish laminate product with solid wood edges.

**Benefit to Environment** - A projected reduction of **.9645 tons/yr.** VOC per year is expected.

### Steps performed to estimate VOC's emitted from current solvent based process

- Edges sprayed 7/1-9/20 2002 = 36,568 LFT. This is an estimate of half of our annual edge production. (See attachment 3 spread sheet for data and calculations)
- To determine lbs. emitted from topcoat we performed a test to determine coverage.

#### Top coat

Sprayed 588 Lft of molding and used 28.865 lbs. of coating

$588/28.865 = 20.37 \text{ LF/LB of coating}$  or  $28.865/588 = .049 \text{ LBS / LF}$

- Emissions from topcoat were determined by the use of coating FN1165 data specification - 3.98lb VOC/gal, Coating density 7.67 lbs./gal

#### Stain

Determined by application estimates of .02 Lbs./ LF

- Emissions from stain were determined from an average of our current-use stains data specifications -determined to be 4.99 lbs. VOC/gal, Coating density 7.89 lbs./gal (see **Table 1** for listing)
- We plugged findings into a spreadsheet to determine  
Topcoat emissions = 777 lbs. VOC  
Stain emissions = 229 lbs. VOC  
Total emissions 1006 lbs. VOC x 2 (to annualize) = 2012 lbs. VOC emitted annually

### Steps performed to estimate VOC emitted from Proposed UV process

**Note: At this time we do not have a UV coating suitable to coat our edges. This must be developed and is part of the project cost.**

- To project the VOC emitted for the proposed UV edge coating process we used an average of our current UV coatings emission specifications. (See Table 2)
  - Note: The coatings reviewed represent baseline numbers for a coating that can be developed as a wipe-on coating for this project. We are using a 50% contingency to assure our estimates.
- Edges sprayed 7/1-9/20 2002 = 36,568 LFT. (Half of our annual edge production. - Same data as solvent process.)
- To determine lbs. emitted from UV topcoat and stain, we estimated the same coverage as solvent base
- Emissions from topcoat were determined from topcoat UV3000 - .14 lb. VOC/gal, Coating density 9.31 lbs./gal
- Emissions from stain were determined from an average of our current use stains UV1000, UV1002, UV1005, UV1001 determined at .125 lbs. VOC/gal, Coating density 9.38 lbs./gal (see table 2)

Emissions = (LBS sprayed / coating density) x VOC content

Thus,

Topcoat emissions =  $(2,994 / 9.31) \times .14 = 45 \text{ lbs.}$

Stain emissions =  $(724 / 9.38) \times .125 \text{ Lb.} = 10 \text{ lbs.}$

Total = 55 Lbs. emitted

Contingency 50% or x 1.5 factor

Total estimated UV emissions =  $55 \times 1.5 = 83 \text{ lbs. annually}$

### Reduction

- 2012 lbs. VOC – 83 lbs. VOC = 1,929 lbs. VOC/yr.  

Current
proposed UV
Reduction
- VOC reduction = 1929 lbs. / 2000 lbs. = **.9645 tons / year**

**Table 1: Current solvent based stains, pigments, and toners**

Stains /Tints	Lbs. VOC/ Gal	Coating density LBS/ Gal
FN1103	6.21	6.922
FN1106	6.50	6.672
FN1108	6.56	6.7554
FN1116	2.79	12.51
FN1117	2.75	12.3432
FN1118	3.18	8.59
FN1120	6.3	7.1724
FN1121	5.75	9.0072
FN1125	4.99	9.198
FN1131	5.7	7.8396
FN1132	6.08	7.923
FN1136	6.59	6.672
FN1137	5.86	7.8396
FN1138	5.85	7.8396
FN1139	5.87	7.8396
FN1140	5.82	7.7562
FN1141	5.66	8.68376
FN1142	1.12	2.0016
FN1143	6.51	6.9222
FN1144	6.44	6.8388
FN1145	6.44	6.8388
FN1146	6.44	6.8388
FN1147	6.44	6.8388
FN1148	6.52	6.8388
FN1149	6.52	6.922
FN1150	1.47	6.672
FN1157	1.42	3.0958
FN1158	6.06	6.5886
FN1160	1.67	7.7562
FN1161	2.69	12.3432
FN1162	2.54	16.5132
Total	4.99	7.89

**Table 2**

Coating Number	Lbs. VOC/ Gal	Coating density LBS/ Gal
UV3000 Top Coat / Seal	.14	9.31
UV1000 Med. Oak Stain	.26	9.45
UV1002 Med. Cherry Stain	.11	9.51
UV1005 Dark Oak Stain	.01	9.05
UV 1001 Cured Cherry Stain	.12	9.50
Average	.125	9.38

**Project 2**– Implementation of water base glue to replace our current solvent based adhesives.

**Benefit to Environment** - An estimated reduction of **1.201** tons VOC per year.

**Project Calculations -**

- Currently solvent based adhesives use is 5.2 % of the total annual VOC.  
 $1.602 \text{ t/yr. (glue emissions 2001)} / 30.8 \text{ t/yr. (total emissions 2001)} = 5.2\%$
- Tons per year of VOC emitted from solvent based glues 2001(based on daily record keeping)

Adhesive Part Numbers	Emissions (Tons/year 2001)	VOC Content	Coating Density
XP00006 – 2262 Plastic Adhesive	.494	5.64 lbs./gal.	7.42 lbs./gal.
18180 – 3M Adhesive #5	1.108	5.32 lbs./gal.	6.59 lbs./gal.
Total	1.602		

- Projecting we will reduce an estimated 75% of VOC emitted from the use of solvent based glues with water base adhesives.
- The estimated reduction in VOC at project completion =  $75 \% \times 1.602 \text{ t/yr.} = 1.201 \text{ t/yr. VOC.}$   
Thus

**Annual Reduction**

$1.602 \text{ t/yr.} - .801 \text{ t/yr.} = \mathbf{1.201 \text{ tons/yr.}}$

2001 glue      -      estimated VOC  
Emissions      reduction

In the Matter of Bretford Manufacturing, Inc.  
Docket No: CAA-5-2002-0016

CERTIFICATE OF FILING AND MAILING


I, Betty Williams, do hereby certify that the original of the foregoing Consent Agreement and Final Order was hand delivered to the Regional Hearing Clerk, Region 5, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604 and that correct copies, were mailed first-class, postage prepaid, certified mail, return receipt requested, to the Respondent's Counsel by placing it in the custody of the United States Postal Service addressed as follows:

Peter Beestrum  
Director of Operations  
Bretford Manufacturing, Inc.  
11000 Seymour Avenue  
Franklin Park, Illinois 60131

I also certify that a copy of the Consent Agreement and Final Order was sent by First Class Mail to:

Julie Armitage, Manager  
Compliance and Enforcement Section  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Springfield, Illinois 62702

on the 11<sup>th</sup> Day of April, 2003.

  
Betty Williams, Secretary  
AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 70010320000601783004